

**REMARKS**

Claims 1-28 are pending in this application. By this Amendment, claims 1 and 15 are amended. Support for the amendments to claims 1 and 15 may be found at least at paragraph [0023] of the specification. No new matter is added by the above amendment. In view of at least the following, reconsideration and allowance are respectfully requested.

**I. Double Patenting Rejection**

The Office Action rejects claims 1 and 4 under provisional obvious-type double patenting over claim 1 of co-pending U.S. Patent Application No. 10/658,812 (Liu-I).

Applicant will address this rejection if, or when, it is not a provisional rejection.

Accordingly, withdrawal of the rejection is respectfully requested.

**II. Claim Rejection under 35 U.S.C. § 103**

The Office Action rejects claims 1-28 under 35 U.S.C. § 103(a) over "Algorithms for Computing the Distances between Unordered Trees," Shaoming Liu and Elichi Tanaka (Liu-II), in view of U.S. Patent No. 6,871,174 (Dolan). This rejection is respectfully traversed.

**Independent Claims 1 and 15**

Independent claims 1 and 15 recite, in part, "calculating a distance between the first text sentence and the second text sentence on the basis of the following expression: the distance = (the calculated distance between the first R tree and the second R tree) / (a sum of the vertexes in the first R tree and the second R trees)."

Liu-II and Dolan, in any combination, do not teach, disclose or suggest "calculating a distance between the first text sentence and the second text sentence on the basis of the following expression: the distance = (the calculated distance between the first R tree and the second R tree) / (a sum of the vertexes in the first R tree and the second R trees)." Therefore, Liu-II and Dolan, either individually or in combination, do not teach, disclose or suggest the subject matter recited in claims 1 and 15.

Claims 2-7 and 16-21 variously depend from claims 1 and 15. Because the applied references, in any combination, fail to render the subject matter of independent claims 1 and 15 obvious, dependent claims 2-7 and 16-21 are patentable for at least the reasons that claims 1 and 15 are patentable, as well as for the additional features they recite.

Accordingly, withdrawal of the rejection is respectfully requested.

Independent Claims 8 and 22

Independent claims 8 and 22 recite, in part, "calculating a distance between the first RO tree and the second RO tree."

Applicant respectfully submits that the applied references, in any combination, do not teach the calculation of a distance between the first RO tree and the second RO tree.

With respect to Liu-II, Applicant respectfully submit that Liu-II fails to teach the calculation of a distance between at least two ordered trees. In fact, the summary of Liu-II discloses, in part, "[t]his paper proposes algorithms for computing three kinds of distances between two rooted and unordered trees (R-trees) and those between two unrooted and unordered trees (trees)."

Further, page 6, line 22 to page 7, line 1 of the specification, discloses that "such a tree, which is rooted and ordered on the graph theory, is referred to as an "RO tree (Rooted and Ordered Tree)," whereas such a tree, which is rooted and not ordered, is referred to as an "R tree (Rooted and Unordered Tree)."

Therefore, because a fundamental principle contained in 35 U.S.C. §112, second paragraph, is that applicants are their own lexicographers, the usage of RO tree in claims 8 and 22 refers to a rooted and ordered tree. Where an explicit definition is provided by the applicants for a term, that definition will control interpretation of the term as it is used in the claim. If one skilled in the art is able to ascertain the meaning of terms recited in a claim in

light of the specification, 35 U.S.C. §112, second paragraph, is satisfied. *See* MPEP §2173.02.

Additionally, Applicant respectfully submits that Dolan fails to cure the deficiencies of Liu-II. Indeed, the Office Action merely relies on Dolan as teaching that a sentence may be converted into a tree. Although the Office Action asserts that Dolan discloses a text sentence comparison method for converting a first text sentence and a second text sentence into a first RO tree and a second RO tree, Applicant submits that even if Dolan were understood as teaching the conversion of a text sentence to a tree, Dolan fails to teach that such a tree is a rooted and ordered tree.

Figs. 3B and 3C of Dolan show the results of analyzing two sentences. However, both Figs. 3B and 3C fail to illustrate the results as being ordered trees. Indeed, there is no order in the trees illustrated in Figs. 3B and 3C.

Thus, claims 8 and 22 are not obvious in view of the applied references.

Claims 9-14 and 23-28 variously depend from claims 8 and 22. Because the applied references, in any combination, fail to render the subject matter of independent claims 8 and 22 obvious, dependent claims 9-14 and 23-28 are patentable for at least the reasons that claims 8 and 22 are patentable, as well as for the additional features they recite.

### **III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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